137-58-6-13397

The Effect of Casting Defects on the Fatigue Strength of Castings

and possessing elevated strength characteristics (their σ_b and σ_s correspond to those of the 35 L and 45 L steel grades) are not greatly sensitive to stress concentrations (a behavior similar to that of steel 20L). Since the existing method of sampling provides no indication of the quality of castings and technology of their production, it is recommended that periodic inspection of these two factors be performed together with the usual quality-control inspections of the metal.

1. Castings--Chemical properties 2. Castings--Mechanical properties I. B.
3. Castings--Fatigue 4. Castings--Fracture 5. Castings--Test results

Card 2/2

VLASOV, V. I.

AUTHORS: Kuleshov, M. Ya., Petrov, N. P., Candidates of Technical Sciences and Vlasov, V. I., Engineer. 129-7-8/16

TITLE: Influence of the conditions of deformation on the properties of the B[illegible]-17 aluminium alloy. (Vliyaniye usloviy deformirovaniya na svoystva splava VD-17).

PERIODICAL: "Metallovedenie i Obrabotka Metallov" (Metallurgy and Metal Treatment), 1957, No.7, pp.33-39 (U.S.S.R.)

ABSTRACT: This alloy is used in the Soviet Union for manufacturing compressor blades of aviation engines by stamping blanks from pressed sheet. Its chemical composition is: 3% Cu; 2.3% Mg; 0.6% Mn; up to 0.3% Fe; up to 0.3% Si; rest Al. The authors consider it of practical interest to study the conditions of deformation on the structure and mechanical properties of this alloy and in this paper the influence of the temperature and the degree of deformation on the fundamental properties of the alloy are investigated. The tests were carried out on strips of 60 x 100 mm cross section from a single melt which were hardened and artificially aged. Four specimens were subjected to long-duration strength tests at 270 C with a load of 6.5 kg/mm^2 and after 100 hours loading the specimens were removed without any failure. The macro and micro-structure conformed to the requirements which have to be

Card 1/3

Influence of the conditions of deformation on the properties of the BД-17 aluminium alloy. 129-7-8/16

met by the material in the hardened state. The blanks were deformed in a 700 ton press applying reductions of 17, 28 and 40% at the temperatures 20, 150, 300, 400, 450 and 500 C; the heating time was 40 mins. After shaping, the specimens were hardened and aged at 180 C for 16 hours. Fig.1 shows the relation between the relative elongation and the widening of the blanks as a function of the degree of deformation at 450 C. Figs. 2-6 show the macrostructures of blanks deformed by 28% (magnification 2.5 times) at 20, 450, 300 (transverse), 300 (longitudinal), and 500 C respectively; Fig.7 shows the structure of a blank deformed by 40% at 450 C, magnification x20. In Fig.8 the relation is plotted between the degree of deformation at 20 C of the turns of a thread and their distribution along the height of the blank; Fig.9 shows the same relation applicable for 450 C; Fig.10 shows the same relation for a total deformation of 40% at 500 C. Fig.11 shows a three-dimensional recrystallisation diagram expressing the grain size as a function of the degree of deformation and the temperature. Fig.12 shows the dependence of the mechanical properties of the alloy, after being deformed by 28%, as a

Card 2/3

Influence of the conditions of deformation on the properties of the B.A. -17 aluminium alloy. (Cont.) 129-7-8/16

function of the temperature between 0 and 500 C. The results of long-duration strength tests at 270 C with a load of 7 kg/mm^2 are plotted in Fig.13 (time to failure vs. temperature) for specimens deformed by 17, 28 and 40%. The results show that the optimum shaping range for this alloy is between 480 and 380 C. There are 13 figures, no references.

AVAILABLE:

Card 3/3

VLASOV, V.I.

Design and installation of the electrical equipment of press forging machinery. Kuz.-shtam.proizv. 6 no.1:47, 3 of cover Ja '64.
(MIRA 17:3)

VLASOV, V.I., kandidat tekhnicheskikh nauk.

Effect of the technological process on the quality of cast steel. Trudy TSNII MPS no.130:65-79 '57. (MLRA 10:9)
(Steel)

VLASOV, V. I.

137-1958

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 2, p 36 (USSR)

AUTHOR: Vlasov, V. I.

TITLE: Generalizing the Advanced Experience of Foundry Experts of Side-blown Bessemer Works Toward the Production of High-Quality Casts (Obobshcheniye peredovogo opyta liavil'shchikov malobessemerovskikh tsekhov po proizvodstvu vysokokachestvennogo lit'ya)

PERIODICAL: Tr. Vses. n.-i. in-ta zh.-d. transp., 1957, Nr 130, pp 85-108

ABSTRACT: An analysis was made of the performance of the single type of side-blown Bessemer converters installed at six plants of the MPS (Ministry of Steel Production). It is noted that there are no unified instructions for the application of the side-blown Bessemer process to the production of higher-quality steels, and it is observed that this situation makes for a lack of uniformity in the chemical composition and mechanical properties of the steel. Tests made on metals from each plant after heat treatment in furnaces equipped with automatic temperature control showed that the side-blown Bessemer steel of the Darnitsa, Kanash, and Armavir plants was not inferior in quality to open-hearth and electric steel. The po quality of the steel at the other plants is attributed to imperfect

-2450

...blown (cont.)

...t of the casts. ...el workers, the ... in the finished steel ... the [P] at 0.07% or ...ufurized in a forehearth ... not in excess of 1330°- ... during the early period of ...at 3500 mm H_2O and that, while ...it be maintained at 3000-2500 mm ... to the converter, under a pressure of ... of 30-36 m^3 per melt, be started simul- ...ast and be stopped 1-2 minutes before com- ...e) that the melt be brought to its conclusion ...e, with a pressure of 3000 mm H_2O.

Card 1/2

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V.I.

1. Casting--Production--Analysis

Card 2/2

VLASOV, V. I.

137-1958-2-2450

Translation from: Referativnyy zhurnal, Metallurgiya, 1958. Nr 2. p 36 (USSR)

AUTHOR: Vlasov, V.I.

TITLE: Generalizing the Advanced Experience of Foundry Experts of Side-blown Bessemer Works Toward the Production of High-Quality Casts (Obobshcheniye peredovogo opyta plavil'shchikov malobes-semerovskikh tsekhov po proizvodstvu vysokokachestvennogo lit'ya)

PERIODICAL: Tr. Vses. n.-i. in-ta zh.-d. transp., 1957, Nr 130, pp 85-108

ABSTRACT: An analysis was made of the performance of the single type of side-blown Bessemer converters installed at six plants of the MPS (Ministry of Steel Production). It is noted that there are no unified instructions for the application of the side-blown Bessemer process to the production of higher-quality steels, and it is observed that this situation makes for a lack of uniformity in the chemical composition and mechanical properties of the steel. Tests made on metals from each plant after heat treatment in furnaces equipped with automatic temperature control showed that the side-blown Bessemer steel of the Darnitsa, Kanash, and Armavir plants was not inferior in quality to open-hearth and electric steel. The poor quality of the steel at the other plants is attributed to imperfections

Card 1/2

Generalizing the Advanced Experience of Foundry Experts of Side-blown (cont.)

in the technique of melting and in the heat treatment of the casts. Taking into account the experience of leading steel workers, the following recommendations are made: a) that in the finished steel the [S] be established at 0.06% or less and the [P] at 0.07% or less; b) that the molten pig iron be desulfurized in a forehearth by treating it with Mg at a temperature not in excess of 1330°-1350°; c) that the pressure of the blast during the early period of the fusion process be maintained at 3500 mm H_2O and that, while the carbon is being burned out, it be maintained at 3000-2500 mm H_2O; d) that the supply of O_2 to the converter, under a pressure of 8 - 12 at and in an amount of 30-36 m^3 per melt, be started simultaneously with the air blast and be stopped 1-2 minutes before completion of the "blow"; e) that the melt be brought to its conclusion on the air blast alone, with a pressure of 3000 mm H_2O. V.I.

Bibliography: 3 references

1. Castings--Production--Analysis

Card 2/2

VLASOV, V. I. (Cand. of Tech. Sci.)

"Effect of Technological Factors on the Quality of Cast Parts."

in book - Improving the Quality of Steel Castings; Transaction of the All-Union Conference, Moscow, Mashgiz, 1958. 214 p.

Among other things, the author recommends the use of sinkheads to promote slow, even, cooling, thus assuring a sounds, dense structure of the castings.

Translation from: Referativnyy zhurnal. Metallurgiya, 1958, Nr 12, p 74 (USSR) SOV/137-58-12-24470

AUTHORS: Karnov, M. Ya., Vlasov, V. I.

TITLE: Vibratory Precision Stamping (Tochnaya ob"yemnaya shtampovka vibratsionnym metodom)

PERIODICAL: Mashinostroitel', 1958, Nr 6, pp 41-42

ABSTRACT: Results are presented of experimental research into the use of a special vibratory stamping equipment for precision stamping and hot sizing of blades and samples of steel and Al alloys. The items stamped are billets heated to the usual forging temperatures in dies heated to 400-450°C by means of a continuously-acting induction heater. During the tests, the vibratory stamping press developed a frequency of 1000-1300 blows per minute, of 15 mm amplitude. The work showed the vibration method of deforming metal to possess a number of attractive properties, namely, reduction of unit pressure of deformation and the possibility of obtaining forgings of good mechanical properties and precise dimensions.

Card 1/1

I. K.

VLASOV, V.I.

Determining the performance of couplings and brakes in crank-type forging machinery. Kuz.-shtam.proizv. 1 no.6:28-32 Je '59. (MIRA 12:9)

(Forging machinery)

VLASOV, V.I.

Selecting the type of a two-speed drive for crankshaft press-forging machines. Kuz.-shtam. proizv. 1 no.8:28-34 Ag '59.
(MIRA 12:12)
(Forging machinery--Transmission devices)

?

VLASOV, V.I.

Design of disk brakes on crank forging presses. Kuz. shtam. proizv. I no.10:27-29 O '59. (MIRA 13:2)
(Forging machinery--Brakes)

SOV/122-59-5-6/32

AUTHOR: Vlasov, V.I., Engineer

TITLE: The Application of Differential Two-Speed Clutches in Crank Presses (Primeneniye differentsial'nykh dvukhskorostnykh muft na krivoshipnykh pressakh)

PERIODICAL: Vestnik mashinostroyeniya, 1959, Nr 5, pp 27-31 (USSR)

ABSTRACT: To obtain the minimum cycle time in a crank press with a given duration of the working stroke, the speed of rotation of the idling part of the cycle should be about three times higher than that of the working part. A differential mechanism in which one of the rotating elements can be stopped by anchoring against a stationary element or else two rotating elements can be coupled together, has been successfully used as a two-speed gear transmission controlled by clutches. Four variants are illustrated (Figures 1 - 4) and briefly described, according to the four possibilities of converting a differential gear into a transmission with a single degree of freedom. Each variant is distinguished by the element of the press transmission through which the additional constraint is applied to the differential. The first element named in the

Card 1/3

The Application of Differential Two-Speed Clutches in Crank Presses

designation of the variant produces the high speed and the second element, a low speed. Thus the first variant (embodied in the "Clearomatic" transmission) belongs to the fly-wheel main-bearing system (Fig 1). The second variant is the drive-shaft main bearing system (Fig 2). The third variant is the main-bearing fly-wheel system (Fig 3) and the fourth variant is the main-bearing drive-shaft system (Fig 4). The first two variants operate as reducing gears during the working stroke and the second two variants operate as couplings. Speed and torque ratios are given for the several variants and the several rotating elements in them. To transmit the same torque, the first and second variants develop large dynamic loads, which explains the use of aluminium alloys in the "Clearomatic" transmission. Of the third and fourth variant, the latter is preferable because its design torque is about 3 times smaller than in other two-speed transmissions. These advantages are said to increase when the unit is placed on a low speed shaft.

This variant is also suitable for the modernisation of existing presses. There are 4 figures, 2 tables and 5 references, 1 of which is Soviet, 3 English and 1 Italian.

S/123/61/000/003/015/023
A004/A104

AUTHORS: Vlasov, V. I., and Komolova, Ye. F.

TITLE: Investigation of shrinkage porosity in steel castings

PERIODICAL: Referativnyy zhurnal, Mashinostroyeniye, no. 3, 1961, 21, abstract 3G178. (V sb. "Usadochn. protsessy v metallakh". Moscow, AN SSSR, 1960, 85-96)

TEXT: The authors have studied the process of formation of porosity and centered shrinkage cavities and their effect on the toughness indices at various temperatures and wearresistance as well as the effect of the dimensions and location of centered shrinkage cavities on the endurance of individual castings. At a 3-4% shrinkage porosity, the toughness of steel decreases by 40% while the endurance of steel with dispersed porosity at alternating loads already decreases rather intensively at stresses which are lower than the endurance limit in compact specimens of the same steel. Moreover, shrinkage defects of small dimensions located in the center of the casting do not affect the endurance during alternating bending. Surface shrinkage porosity does not reduce the toughness and endurance if the number of pores is not large and their depth not exceeding 2 mm.

Card 1/2

Investigation of shrinkage porosity ... S/123/61/000/003/015/023
A004/A104

The greater the compactness of the steel the greater is its resistance to wear. There are 7 figures and 5 references.

Yu. Stepanov

[Abstractor's note: Complete translation]

Card 2/2

VLASOV, V.I., aspirant

Law of the distribution of specific pressure and the coefficient of friction along the generatrix of the contact of disk clutches and brakes. Izv.vys.ucheb.zav.; mashinostr. no.11:32-39 '61.
(MIRA 14:12)

1. Moskovskiy avtomekhanicheskiy institut.
(Friction) (Mechanical wear)

VASILEVSKIY, P.F., kand. tekhn. nauk; DEMAKOV, A.Ye.; PLEKHANOV, P.N.; ASSONOV, A.D.; VLASOV, V.I.; KANEVSKAYA, T.B.; SHLENTSOV, K.G.; RYZHIKOV, A.A.; RUBTSOV, N.N., zasl. deyatl' nauki i tekhniki RSFSR, doktor tekhn. nauk prof., red.; MARTENS, S.L., red. izd-va; EL'KIND, V.D., tekhn. red.

[Handbook on founding; shaped steel casting] Spravochnik liteishchika; fasonnoe stal'noe lit'e. [By] P.F.Vasilevskii i dr. Pod obshchei red. N.N.Rubtsova. Moskva, Mashgiz, 1962. 611 p. (MIRA 15:6)

(Founding--Handbooks, manuals, etc.)

VLASOV, V.I., kand.tekhn.nauk; KOKHAN, I.S., inzh.

Work of friction units of crank presses in automatic lines.
Vest.mashinostr. 44 no. 2:46-50 F '64. (MIRA 17:7)

ZOLOTARSKIY, A.F.; VLASOV, V.I.

Nonferrous metals and alloys for railroad equipment. Trudy TSNII MPS no.277:3-4 '64. (MIRA 17:6)

1. Zamestitel' direktora Vsesoyuznogo nauchno-issledovatel'skogo instituta zheleznodorozhnogo transporta. (for Zolotarskiy).
2. Rukovoditel' otdeleniya ispytaniya materialov i konstruktsii Vsesoyuznogo nauchno-issledovatel'skogo instituta zheleznodorozhnogo transporta. (for Vlasov).

L 32479-66 EWT(l)/EWA(c)/EPF(n)-2/EWP(m)-2 IJP(c) JD/JG

ACC NR: AP6002556 SOURCE CODE: UR/0286/65/000/023/0055/0055

AUTHORS: Vlasov, V. I.; Aleshin, V. S.

ORG: none

TITLE: Method for measuring the temperature of liquid and gas streams. Class 42, No. 176706

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 23, 1965, 55

TOPIC TAGS: temperature measurement, liquid flow, gas flow

ABSTRACT: This Author Certificate presents a method for measuring the temperature of liquid and gas streams. The method consists of reading two thermally coupled detectors having differing response rates to temperature changes of the medium, decreasing the readings of one of the detectors a definite number of times, and subtracting this result from the readings of the second detector. To decrease the error with amplification of the output signal and to simplify the measuring procedure, the difference in readings of the two detectors is taken, amplified a fixed number of times, and added to the readings of the detector with the smaller

Card 1/2 UDC: 536.532.084.82/.83

L 39479-66

ACC NR: AP6002556

response rate. The amplification coefficient depending on the degree of thermal coupling between the detectors is defined as the ratio of the temperature difference of the medium and the detector with the smaller response rate to the temperature difference of the two detectors.

SUB CODE: 20/ SUBM DATE: 20Nov64

Card 2/2 MLP

L 23860-66 EWT(d)/EWT(l)/EWP(m)/EWA(d)/T/EWA(l) IJP(c)

ACC NR: AP6012913 SOURCE CODE: UR/0020/66/167/005/1016/1018

AUTHOR: Vlasov, V. I. 74

ORG: none B

16

TITLE: Improvement of the method of statistical investigations (Monte Carlo) for calculating rarefied gas flows /

SOURCE: AN SSSR. Doklady, v. 167, no. 5, 1966, 1016-1018

TOPIC TAGS: aerodynamics, Monte Carlo method, rarefied gas, collision cross section, computer storage

ABSTRACT: An improved method for statistical investigations (Monte Carlo method) is suggested and applied to calculating rarefied gas flows. It is shown that one can avoid the storage of a complete distribution function if a quasi-Maxwellian molecular model is adopted for which the total effective collision cross section of two molecules with velocities v and v_1 is equal $\sigma = \sigma(g) = \sigma_1/g$ where σ_1 = constant and g is the modulus of the relative velocity of molecules before collision. This method is illustrated by the problem of heat transfer between two parallel surfaces with parameters taken from Haviland and Lavin (The Physics of Fluids, v. 5, no. 11, 1962). The improvement results in a substantial reduction (8 times) of the required computer storage. Orig. art. has: 2 figures and 4 formulas. [AB]

2

SUB CODE: 20/ SUBM DATE: 30Jun65/ ORIG REF: 001/ OTH REF: 001

Card 1/1 dda UDC: 533.6.011.8

L 25979-66 FBD/EWT(1) GW/WS-2

ACC NR: AP6015081 SOURCE CODE: UR/0020/66/168/001/0055/0058

AUTHOR: Vitkevich, V. V.; Antonova, T. D.; Vlasov, V. I.

ORG: Institute of Physics im. P. N. Lebedev, Academy of Sciences SSSR (Fizicheskiy institut AN SSSR)

TITLE: Observations of intensity fluctuations in radio emission from the quasi-stellar source 3C-48 caused by heterogeneities of the interplanetary plasma

SOURCE: AN SSSR. Doklady, v. 168, no. 1, 1966, 55-58

TOPIC TAGS: supercorona, quasistellar source, angular distance, fluctuation period, astronomical unit

ABSTRACT: Heterogeneities in the solar supercorona with velocities reaching several thousand km per second were observed at distances of up to 100 solar radii. Using the east-west line of the Radioastronomical Station of the Institute of Physics of the Academy of Sciences SSSR, systematic investigations of the quasi-stellar 3C-48 source were made on the 3.5-m wavelength. In February, the source approached the sun. In March, fluctuations in the brightness of the source began. Fluctuations increased with the decrease in angular distance between the source and the sun, attaining the maximum in April and May when the minimum angular distance occurred. A table in the original article and a histogram show the rate of fluctuations of the source. The mean period of fluctuations was 3 and 4 seconds. A weak second period

Card 1/2

UDC: 523.164.4+523.152.3

L 25979-66

ACC NR: AP6015081 O

of 6 and 7 seconds may be identified. This is related to the 3.5-m wavelength. An attempt to continue the investigation on the 7.9-m wavelength was unsuccessful. The area of scattered light at a distance of one astronomical unit with a diameter of 500—1000 km is seen at an angle of 0.7"—1.4". The effective angular diameter of the source was accepted as equal to 0.1". Orig. art. has: 2 figures, 1 table, and 1 formula. [EG]

SUB CODE: 03/ SUBM DATE: 21Jul65/ ORIG REF: 006/ OTH REF: 005/ ATD PRESS: 4256

Card 2/2 FW

L 04272-67

ACC NR: AP6013296 SOURCE CODE: UR/0413/66/000/008/0090/0090

41
B

AUTHORS: Vlasov, V. I.; Aleshin, V. S.

ORG: none

9M

TITLE: A gauge for the temperature of liquid or gas. Class 42, No. 180830

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 8, 1966, 90

TOPIC TAGS: temperature measurement, thermocouple, TEMPERATURE GAGE, GAS, LIQUID PROPERTY

ABSTRACT: This Author Certificate presents a gauge for registering the temperature of liquid or gas. The gauge contains two thermally connected thermocouples. To diminish substantially the thermal inertia, one of the thermal electrodes is made in the form of a massive metallic two-step rod, the second step of which is usually of a smaller diameter. This rod carries two ducts carrying the other two thermal electrodes made of, say, chromel. One contact is made on the face of the small step of the first thermoelectrode, and the second is formed on its base. To simplify the measuring circuit, the thermoelectrodes of the gauge are so selected that the ratio between the sensitivity of the thermocouple made of two dissimilar electrodes passing through the ducts of the first thermoelectrode and the sensitivity of the thermocouple connected on the face of the small step of the first thermoelectrode is smaller than unity.

SUB CODE: 13/ SUBM DATE: 20Nov64

Card 1/1 fv UDC: 536.532.084.82/.83

L 21481-66 EWT(1)/FBD GW/WS-2

ACC NR: AP6006769 SOURCE CODE: UR/0033/66/043/001/0013/0019

42
40
B

AUTHORS: Artyukh, V. S.; Vitkevich, V. V.; Vlasov, V. I.; Kafarov, G. A.; Matveyenko, L. I.

ORG: Physics Institute im. P. N. Lebedev, Academy of Sciences SSSR (Fizicheskiy in-t Akademii nauk SSSR)

TITLE: On the radio brightness distribution of the Crab Nebula in the meter wavelength region from observations of the lunar occultation of 4 August 1964

SOURCE: Astronomicheskiy zhurnal, v. 43, no. 1, 1966, 13-19

TOPIC TAGS: radio astronomy, radio emission, cosmic radio source, nebula

ABSTRACT: Results are presented of observations of the Crab Nebula during the lunar occultation of 4 August 1964 at wavelengths of 1.4, 5.0, and 7.5 m. The occultation was close to central, and the first phase occurred near culmination. The interference method was used for observation to eliminate background effects. The antenna types used, their distribution, and other details of the radio interferometers are discussed. Since the antennas were fixed, only the first two contacts of the occultation were observed. The observed interference signals

Card 1/2 UDC: 523.164

L 21481-66
ACC NR: AP6006769

2

are shown, and the methods of interpretation and the occultation curves are presented. The derived brightness distribution curves of the Crab Nebula in the direction of the lunar motion (close to the direction of right ascension) are given. The right ascension of the centroid of the radio emission at 7.5 m with respect to the double star is 0"±10", while that at 1.4 and 5.0 m is shifted toward the western boundary of the nebula by 15"±7". Several bright regions were detected and their intensities, spectral indices, and dimensions are given. These results were obtained by comparing the present observations with those of the lunar occultation of 16 April 1964 at 1.4 m in which the lunar motion was directed approximately along the minor axis of the nebula. The authors thank R. D. Dagkesamanskiy for help in the observations and I. M. Dagkesamanskaya for calculating the topocentric coordinates of the Moon, the spatial frequency spectrum, and its variation during occultation. Orig. art. has: 2 formulas, 2 tables, and 6 figures. [04]

SUB CODE: 03/ SUBM DATE: 17Apr65/ ORIG REF: 004/ OTH REF: 007/ ATD PRESS: 4218

Card 2/2 PB

VLASOV, V.I., kand. tekhn. nauk; PUTRYA, N.N., inzh.; KOMOLOVA, Ye.F., kand. tekhn. nauk

Increasing the operating efficiency of the switch system parts on high-speed sections. Vest. TSNII MPS 24 no.8:3-6 '65. (MIRA 19:1)

BABIY, V.I.; VITKEVICH, V.V.; VLASOV, V.I.; GORELOVA, M.V.; SUKHOVEY, A.G.

The solar supercorona from observations made during 1959-1963.
Astron. zhur. 42 no.1:107-116 Ja-F '65.
(MIRA 18:2)

1. Fizicheskiy institut im. P.N. Lebedeva AN SSSR.

VLASOV, V.I., kand. tekhn. nauk, dotsent; KOKHAN, L.S., inzh.

Calculating friction units of crank presses with retinax inserts. Vest. mashinostr. 45 no.4:26-29 Ap '65.

(MIRA 18:5)

VLASOV, V.I., kand. tekhn. nauk; SHKOL'NIK, L.M., kand. tekhn. nauk; LYUTINA, R.V., inzh.

Increasing the fatigue strength of rails in the zone of the bolt holes. Vest. TSNII MPS 23 no.8:36-39 '64 (MIRA 18:2)

VLASOV, V.I., kand. tekhn. nauk; KOKHAN, L.S., aspirant

Determining the friction work of disk clutches and brakes of crank presses. Izv.vys.ucheb.zav.;mashinostr. no.5:61-68 '64.
(MIRA 18:1)

1. Moskovskiy avtomekhanicheskiy institut.

ACCESSION NR: AP5012128 UR/0231/64/000/008/0034/0039

AUTHOR: Vlasov, V. I. (Candidate of technical sciences); Shkol'nik, L. M. (Candidate of technical sciences); Lyutina, R. V. (Engineer)

transporta, Vestnik, no. 8, [illegible]

TOPIC TAGS: fabricated structural metal, railway track

Abstract: The following measures are recommended for increasing the fatigue strength of rails in the area of [illegible]. The rails should be made with

Card 1/2

L 40726-65

ACCESSION NR: AP5012128

with pressee for strengthening the rails. Small pressee (15-20 tons) are required for strengthening. Orig. art. has 4 figures and 2 tables.

ASSOCIATION: none

SUBMITTED: 00 ENCL: 00 SUB CODE: IE

NO REF SOV: 002 OTHER: 000 JPRS

Card 2/2

VLASOV, V.I.

New strain gauge for pneumatic systems. Kuz.-shtam. proizv. 4 no.1:44-45 Ja '62. (MIRA 17:3)

VLASOV, V.I., aspirant

Determining the rated moment for belt brakes. Izv. vys. ucheb. zav.; mashinostr. no.9:81-87 '63. (MIRA 17:3)

1. Moskovskiy avtomekhanicheskiy institut.

IGNATOV, A.A.; VLASOV, V.I.; ZALESSKIY, V.I., prof., red.; SIROTIN, A.I., red.izd-va; MODEL', B.I., tekhn.red.

[Clutches, brakes, and control mechanisms for crank press forging machines] Mufty, tormoza i mekhanizmy upravleniia krivoshipnykh kuznechno-pressovykh mashin. Moskva, Mashgiz, 1963. 446 p. (MIRA 16:11)
(Forging machinery--Design and construction)

VLASOV, V.I.; KOMOLOVA, Ye.F.; LADYZHENSKIY, B.N., kand. tekhn. nauk, retsenzent; MARKIZ, Yu.L., inzh., red.izd-va; SMIRNOVA, G.V., tekhn. red.

[Cast G13L high-manganese steel; properties and manufacture] Litaia vysokomargantsovistaia stal' G13L; svoistva i proizvodstvo. Moskva, Mashgiz, 1963. 194 p. (MIRA 16:6)

(Manganese steel) (Steel castings)

VLASOV, V.I., kand.tekhn.nauk

Continuous crushing and milling plant. Khim.mash. no.4:6-7 Jl-Ag '62. (MIRA 15:7)
(Milling machinery)

VLASOV, V.I., aspirant

Determining the efficiency of friction clutches and brakes.
Izv.vys.ucheb.zav.; mashinostr. no.4:111-116 '62. (MIRA 15:7)

1. Moskovskiy avtomekhanicheskiy institut.
(Clutches (Machinery)—Testing)
(Brakes—Testing)

VLASOV, V.I., kand. tekhn. nauk; ZAROCHENTSEV, G.V.

Testing of the structure of the metal of spring suspension rolls for electric locomotives. Vest. TSNII MPS 23 no.5:34-36 '64.
(MIRA 17:11)

BUVALKIN, A.K.; VLASOV, V.I.

Triassic sediments in southern Kazakhstan. Izv. AN Kazakh.SSR. Ser.geol. no.4:19-30 '61. (MIRA 15:3)
(Kazakhstan--Geology, Stratigraphic)

VLASOV, V.T.

Recent data on the age and coal content of Mesozoic deposits in southeastern Kazakhstan. Vest.AN Kazakh.SSR 18 no.5:30-38 My '62. (MIRA 17:10)

ARTYUKH, V.S.; VITKEVICH, V.V.; VLASOV, V.I.; KAFAROV, G.A.; MATVEYENKO, L.I.

Distribution of the radio brightness of the Crab nebula on the meter wavelengths derived from observations of lunar occultations on August 4, 1964. Astron. zhur. 43 no. 1:13-19 Ja-F '66 (MIRA 19:2)

1. Fizicheskiy institut imeni P.N. Lebedeva AN SSSR. Submitted April 17, 1965.

TSYGANKOV, Grigoriy Mineyevich; VLASOV, Vladimir Kuz'mich;
LILENKO, S.I., red.

[Experience in the treatment of acute pneumonias at home]
Opyt lecheniia ostrykh pnevmonii v domashnikh usloviiakh.
Leningrad, Meditsina, 1964. 126 p. (MIRA 17:10)

BAKUSHINSKIY, A.B.; VLASOV, V.K.

Calculation of the energy levels of an exciton by means of continuous integrals. Vych. met. i prog. 1:103-119 '62.
(MIRA 15:8)

(Excitons) (Integrals, Generalized)

BAKUSHINSKIY, A.B.; VLASOV, V.K.

A method for the numerical solution of Dirichlet's problem for the Laplace equation. Vych. mat. i prog. 1:141-151 '62.
(MIRA 15:8)
(Differential equations--Numerical solutions)

VLASOV, V.K. (Leningrad)

Acute pneumonia in influenza. Klin.med. 36 no.12:72-75 D '58. (MIRA 12:6)

1. Iz kafedry propedevtiki vnutrennikh bolezney No.2 (nach. - prof. I.T.Teplov) Voyenno-meditsinskoy ordena Lenina akademii imeni S.M.Kirova.

(INFLUENZA, compl.
pneumonia, acute (Rus))
(PNEUMONIA, compl.
influenza in acute pneumonia (Rus))

AUTHORS: Bakushinskiy, A. B.; Vlasov, V. K. S/194/62/000/001/001/010

TITLE: Calculation of the exciton energy levels with the aid of a continual integral.

SOURCE: Vychislitel'nyye metody i programmirovaniye; sbornik rabot Vychislitel'nogo tsentra Moskovskogo universiteta. no.1. Ed. by N. P. Trifonov, G. S. Roslyakov, and Ye. A. Zhogolev. [Moscow] Izd-vo Mosk. un-ta. 1962, 103-119.

TEXT: The paper endeavors to apply a method previously employed by Gel'fond Chentsov and Sokolov-Ivanenko to the calculation of the lower energy level of the exciton, that is, the "particle" that corresponds to a bound electron and a "hole." It occurs in a semiconductor, for example Cu_2O, crystal during irradiation of the crystal by light with quanta of $E < h\nu_{min}$, where ν_{min} is the lowest light frequency that is sufficient to transit an electron from the valence zone into the conduction zone. Here excitation of the atom, but no ionization, takes place. A bond between the electron and the hole remains. The so-called exciton, then, is the particle that corresponds to the excitation wave that might be used to describe the propagation of the excited state along the points of a crystalline lattice as a result of the periodic

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structure of the crystal. The paper examines, more specifically, excitons in Cu_2O crystals. The posing of the problem, the calculation method, and a brief description of the computational program are set forth. It is noted that the results adduced here cannot be regarded as definitive, inasmuch as the problem of a more rigorous estimate of the accuracy of the methods proposed remains open. The physical constants of the crystal investigated here are taken from Ipatova, I. P., On the energy spectrum of the exciton in an ionic crystal, AN SSSR, Izv., ser. fiz., v.21, no.1, 1957. There are 1 figure, 1 table, and 6 references (3 Russian-language Soviet and 3 English-language).

L 11077-63 EWT(d)/FCC(w)/BDS AFFTC IJP(C)

ACCESSION NR: AP3001110 S/0208/63/003/003/0574/0580

53
52

AUTHOR: Vlasov, V. K.; Bakushchinskiy, A. B.

TITLE: The method of potentials and numerical solution of the Dirichlet problem for the Laplace equations 16

SOURCE: Zhurnal vychislitel'noy matematiki i matematicheskoy fiziki, v. 3, no. 3, 1963, 574-580

TOPIC TAGS: numerical solution method, Dirichlet problem, Laplace equation

ABSTRACT: The approximate method developed by N. N. Bogolyubov and N. M. Krylov for the numerical solution of integral equations of the theory of potentials is applied to the numerical solution of the exterior Dirichlet problem for the Laplace equations. The approximate value of the harmonic function and the estimate of the approximation error are derived for the cases when the boundary of the domain is a smooth curve and when it is a convex curve with some rectilinear portions. It is noted that the method presented can be easily realized on an electronic computer and makes possible much faster calculation of the values of harmonic functions at discrete points than other numerical methods. Numerical results of two examples of solving the Dirichlet problem for the Laplace equation by the method described

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ACCESSION NR: AP3001110

are presented. The program was written for the "Strela" computer and realized for any number of partitions of the boundary curve and for any arbitrary domain. "In conclusion the authors acknowledge their deep gratitude to A. N. Tikhonov for his valuable counsel in discussing the present work." Orig. art. has: 25 equations and 3 tables.

ASSOCIATION: none

SUBMITTED: 13Apr62 DATE ACQ: 10Jun63 ENCL: 00

SUB CODE: MM NO REF SOV: 007 OTHER: 002

Card 2/2

VLASOV, V.K. (Moskva); BAKUSHINSKIY, A.B. (Moskva)

Method of potentials and numerical solution of the Dirichlet problem for the Laplace equation. Zhur. vych. mat. i mat. fiz. 3 no.3: 574-580 My-Je '63. (MIRA 16:5)

(Boundary value problems)
(Differential equations--Numerical solutions)

L 19429-63 EWT(1)/BDS/FCC(w) AFFTC/ASD/IJP(C) S/0044/63/000/006/V003/V009

ACCESSION NR: AR3005386 X B

SOURCE: RZh. Matematika, Abs. 6V23

AUTHOR: Bakushinskiy, A. B.; Vlasov, V. K.

TITLE: Computation of exciton energy levels with the aid of a continual integral

CITED SOURCE: Sb. rabot Vychisl. tsentra Mosk. un-ta, v. 1, 1962, 103-119

TOPIC TAGS: Monte Carlo method, exciton, continual integral, eigenvalue, eigenfunction, Laplace operator, Hamiltonian operator, Schroedinger equation, Green function, Cauchy problem

TRANSLATION: The authors consider the equation

$$\frac{\partial \psi}{\partial t} = -H\left(x, \frac{\partial}{\partial x}\right)\psi. \qquad (1)$$

having the same energy spectrum (eigenvalues of the Hamiltonian operator H) as the Schroedinger equation of quantum mechanics

$$i\frac{\partial \psi}{\partial t} = H\left(x, \frac{\partial}{\partial x}\right)\psi.$$

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The Green function of the Cauchy problem for equation (1) has the form

$$G(x, x_0, T) = \sum_{n=0}^{\infty} \varphi_n(x_0)\,\varphi_n(x)\,e^{-E_n T},$$

where $E_n (E_0 < E_1 < \ldots < E_n < \ldots)$ and $\varphi_n(x)$ are the eigenvalues and eigenfunctions of the operator H, respectively. The authors employ the integral with respect to Wiener's measure, and to compute the "lower energy level" (E_0) of the exciton study the asymptotics of the continual integral

$$E_0 = -\lim_{T\to\infty} \frac{1}{T} \ln \int_C \exp\left\{\int_0^T H[x, \tau]\,d\tau\right\} d_W x(\tau). \quad (2)$$

where C is the space of function $x(\tau)$; $x(0) = 0$,

$$d_W x(\tau) = \exp\left\{-\frac{1}{2}\int_0^T [x(\tau)]^2\,d\tau\right\} \prod_0^T dx(\tau).$$

In the case considered by the authors the Hamiltonian has the form:

$$H = -\frac{\hbar^2}{2m_1}\Delta_{r_1} - \frac{\hbar^2}{2m_2}\Delta_{r_2} - \frac{e}{n^2 r_{12}} - \sum_k \left\{\frac{1}{2\hbar} \dot{q}_k^2 - \right.$$

$$\left. - \frac{\omega^2}{2\hbar} q_k^2 - \frac{1}{\hbar}\rho_k (\sin k r_1 + \sin k r_2)\, q_k \right\},$$

2/3

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L 19429-63
ACCESSION NR: AR3005386

0

where $\hbar$ is Planck's constant, m_1 is the electron mass, Δ is the Laplace operator

$$\rho_k = 2\omega c \sqrt{\frac{2\pi c}{v}} \cdot \frac{1}{|k|}.$$

ω is the frequency of lattice oscillation, v is the volume of the crystal, r_1 is the vector describing the electron position, r_2 is the vector describing the position of the "hole", q_k, q_k are the generalized coordinates and velocities of the lattice molecules. The integral with respect to Wiener's measure appearing in the right-hand side of (2) is computed approximately by the Monte Carlo method. The computation technique is described. A brief description of the program is given. The computations were carried out on a "Strela-4" computer. D. Topolyanskiy

DATE ACQ: 24Jul63 SUB CODE: MM, PH ENCL: 00

Card 3/3

VLASOV, V.L.

Systematic error incurred in comparing acoustic receivers related to reflected waves. Trudy inst. Kom. stand., mer. i izm. prib. no.73:59-71 '63. (MIRA 17:6)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut fiziko-tekhnicheskikh i radiotekhnicheskikh izmereniy.

ACC NR: AP7000283 (A,N) SOURCE CODE: UR/0413/66/000/023/0167/0167

INVENTOR: Vlasov, V. I.

ORG: None

TITLE: A device for measuring the coefficient of axial concentration and the directivity factor in transmitters and receivers of acoustic and electromagnetic radiation. Class 21, No. 151700

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 23, 1966, 167

TOPIC TAGS: electronic measurement, antenna directivity, acoustic radiation, electromagnetic radiation, electromeasuring device

ABSTRACT: This Author's Certificate introduces a device for measuring the coefficient of axial concentration and the directivity factor in transmitters and receivers of acoustic and electromagnetic radiation. For complete automation of the measurement process, the installation contains a detector connected to the radiation receiver and to a converter which changes the detected voltage into a fixed-frequency signal. The device also contains a unit for double conversion of this signal in which the second heterodyne voltage is provided by the initial fixed-frequency voltage with continuous phase variation by means of a transmitting selsyn linked to the rotating mechanism of the receiver or emitter. In addition, the installation contains an integrator and a relay system which connects the converter to the integrator in the case of continuous rotation of the receiver or emitter, and disconnects the converter from the integrator in the case of discrete rotation.

SUB CODE: 09,20/ SUBM DATE: 19Jun61

Card 1/1

VLASOV, V.L.

Circuits for pulse modulation of harmonic signals. Izm.tekh.no.6:45-47 N-D '56. (MLRA 10:1)

(Pulse techniques (Electronics))

S/058/61/000/002/018/018
A001/A001

Translation from: Referativnyy zhurnal, Fizika, 1961, No. 2, pp. 416-417, #2Zh613

AUTHOR: Vlasov, V.L.

TITLE: An Investigation of High-Frequency Ultrasonic Fields in Liquids by the Optical Microphasometric Method

PERIODICAL: "Tr. in-tov Kom-ta standartov, mer i izmerit. priborov pri Sov.Min. SSR", 1960, No. 45, (105), pp. 28 - 50

TEXT: The author describes the application of the optical microphasometric method proposed by G.S. Gorelik (Dokl. AN SSSR, 1952, Vol. 83, p. 549) to measuring ultrasonic pressure, standing wave coefficient, phase angle, and impedance of materials in the range of high ultrasonic frequencies. An ultrasonic beam, in which standing waves and amplitude-phase inhomogeneities may occur, is placed into one of the arms of the Michelson interferometer. A light ray passes through the beam parallel to the emitter plane. The interference picture is projected on the sensitive aperture of a photomultiplier. The picture displacement, under the action of ultrasonic beam, gives rise to modulation of photocurrent, which

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S/058/61/000/002/018/018
A001/A001

An Investigation of High-Frequency Ultrasonic Fields in Liquids by the Optical Microphasometric Method

makes it possible to determine the optical difference of the course of light rays caused by ultrasonic waves. Two cases of interferometer operation are considered: with the wedge edge of equivalent air plate perpendicular and parallel to the front of ultrasonic waves. Specific difficulties connected with high frequency are removed by heterodyning, and measurements of the amplitude of the course difference are reduced to known low-frequency measurements. The author describes also the method of calibrating ultrasonic probes in which optical measurements are complemented by amplitude-phase measurements conducted with the probe in the ultrasonic field, with the purpose of determining absolute values of ultrasonic pressure at the points of the field. Differences in the course of light rays, caused by the presence of ultrasonic field, are recomputed into ultrasonic pressures by the Lorentz formula. An interference comparator of Koesters (Michelson-type interferometer) with interference lines of "equal width" is used in the device with which ultrasonic pressures are measured and hydrophones are calibrated. A bath-tub with water is placed into one of the arms of the interferometer; the tub has windows of optical glass and a barium titanate ultrasonic emitter,

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S/058/61/000/002/018/018
A001/A001

An Investigation of High-Frequency Ultrasonic Fields in Liquids by the Optical Microphasemetric Method

50 mm in diameter, built-in into the butt wall. A ФЭУ -19 (FEU-19) photomultiplier is used at the output of the interferometer, on whose cathode interference bands are projected through a slit. Quantities entering the formula of probe sensitivity are determined by means of special electronic equipment which consists of a synchronous balance detector and a narrow-band ($\sim$0.5 cps) low-frequency filter. Measurements are conducted in the frequency range from 350 to 500 kc. The least pressure which could be measured with the device described amounts to 2×10^{-4} bar which corresponds to a difference in the course of light of 100 Å. The mean non-systematic error of measurements does not exceed 5%.

A. Reznikov

Translator's note: This is the full translation of the original Russian abstract.

Card 3/3

42071

S/589/62/000/061/005/005
A061/A126

24.1830

AUTHOR: Vlasov, V.L.

TITLE: Investigation of a new optical method of calibrating ultrasonic hydrophones in the frequency range from 200 kc to 1 Mc

SOURCE: USSR. Komitet standartov, mer i izmeritel'nykh priborov. Trudy institutov Komiteta. No. 61 (121). 1962. Issledovaniya v oblasti akusticheskikh i gidroakusticheskikh izmereniy. 79 - 97

TEXT: The new method developed by the author for the calibration of ultrasonic pickups [V.L. Vlasov, Avtorskoye svidetel'stvo no. 120350, 1958; Sbornik trudov VNIIFTRI, no. 45 (105), pp 28 - 50, 1960; Optiko-interferometricheskiy metod graduirovki elektroakusticheskikh preobrazovateley (Optical interferometer method of calibrating electroacoustic transducers)] is based on a combination of absolute interferometer measurements of the path difference of a light beam passing through a nonuniform ultrasonic field and on relative pickup measurements of amplitude and phase distribution of pressure along the light beam path. This method permits pickups to be calibrated in an undamped tank in the

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presence of reflected waves whose angles of incidence are such that the path difference is vanishing. This is achieved by setting up the reflector at 10 - 20° to the vertical. An electronic computer device, specially designed for the calibration of pickups by the method described, records the amplitude-phase ratios and their integrals as the pickup moves automatically along the light beam path. The pickup response is obtained as the ratio between two quantities; the voltage integral and the sound-pressure integral, both taking the phase into account. The error of the method is within ± 2.5%. Absolute calibrations are possible in the 200 - 1,000 kc range with an error of ± 6%. There are 11 figures and 4 tables.

SUBMITTED: February, 1961

ANTONOV, V. Ya., VLASOV, V. M., KRIVONOSOV, V. S., BELOKHVOSTOV, A. G. and SKVORTSOV, V. S.

"Treatment of herpes tonsurans..."
Veterinariya, vol. 39, no. 2, February 1962 pp. 24

VLASOV, V. M. (Docent)

"High-molecular substances in the treatment of infectious diseases...."
Veterinariya, vol. 39, no. 2, February 1962 pp. 23

SHOSTAKOVSKIY, M.F.; VLASOV, V.M.; MIRSKOV, R.G.; LOGINOVA, I.Ye.

Synthesis and transformations of organotin acetylenic compounds. Part 3: Tin organic acetylenic acetals. Zhur. ob. khim. 34 no.9: 2843-2845 S '64. (MIRA 17:11)

1. Irkutskiy institut organicheskoy khimii Sibirskogo otdeleniya AN SSSR.

SHOSTAKOVSKIY, M.F.; VLASOV, V.M.; MIRSKOV, R.G.; LOGINOVA, I.Ye.

Synthesis and transformations of acetylenic organotin compounds. Part 3: Acetylenic organotin acetals. Zhur. ob. khim. 34 no.10: 3178-3180 O '64. (MIRA 17:11)

1. Irkutskiy institut organicheskoy khimii Sibirskogo otdeleniya AN SSSR.

Vlasov, V. M.

USSR/ Mathematics

Card 1/2 Pub. 22 - 1/43

Authors : Vlasov, V. M.

Title : Differential equations of movement containing a slowness parameter

Periodical : Dok. AN SSSR 106/1, 7-10, Jan 1, 1956

Abstract : The differential equation $\frac{d}{dt}\left[m(\mu t)\dot{x} \right] + \mu f(\mu t, x, \dot{x}) + Q(\mu t, x) = 0$ with a small lagging parameter (μ) expressing nonlinear oscillations is analyzed. The solution of this equation is studied which leads to the following statement: under initial conditions $x(0) = x_0$, $\dot{x}(0) = \dot{x}_0$ and provided that sing Q = sing x, the solution of the above differential equation will vary with a slowly changing amplitude and the period of oscillations. Formulae for the slowly changing amplitude and the period

Institution : State Moscow University imeni M. V. Lomonosov

Presented by: Academician I. G. Petrovskiy, September 19, 1955

Card 2/2 Pub. 22 - 1/43

Periodical : Dok. AN SSSR 106/1, 7-10, Jan 1, 1956

Abstract : of oscillations are derived, their application to calculations will give an error of the order μ^{l} in the time range $t \sim 1/\mu$. Physical interpretation of the quantities m ($\mu\varepsilon$) and μ is presented. Five references: 1 USA and 4 USSR (1940-1955).

PICHUGIN, A.A.; VLASOV, V.M.; MELAMED, V.Z.; LYUBIMOV, B.N.

Sprayer for dust settling sprinkler devices. Biul.TSIICHM no.4:50 '61. (MIRA 14:10)

(Sprinklers)

LUBENETS, V.D., kand.tekhn.nauk, dots.; FROLOV, Ye.S., kand.tekhn.nauk; VASIL'YEV, V.I., inzh.; VLASOV, V.M., inzh.; ZAKHAROV, B.D., inzh.

Investigating the performance of the VN-120 vacuum-pump. Izv. vys. ucheb.zav.; mashinostr. no.4:166-171 '59. (MIRA 13:4)

1.Moskovskoye vysshaye tekhnicheskoye uchilishche im. Baumana.
(Vacuum pumps)

VLASOV, V. M.

1323. Issledovaniya v oblasti prevrashcheniy prostykh vinilovikh efirov i silanolov. M., 1954, 12s. 20sm. (Akad. nauk SSSR. In-t organich khmii im. N. D. Zelinskogo). 100 ekz. Bespl.—[54-54218]

SO: Knizhnaya Letopis, Vol. 1, 1955

VLASOV, V.M.

USSR/Chemistry - Synthesis

Card 1/1 Pub. 40 - 25/27

Authors : Shostakovskiy, M. F.; Kochkin, D. A.; and Vlasov, V. M.

Title : Synthesis and conversions of oxygen-containing silicon-organic compounds

Periodical : Izv. AN SSSR. Otd. khim. nauk 6, 1120-1123, Nov-Dec 1954

Abstract : An investigation was conducted to determine the reaction between ethylene oxide and trialkyl(aryl)silane chlorides : trimethyl-, dimethylethyl-, tri-ethyl- and diethylphenylsilane chlorides. The derivation of 2-chloroethoxy dimethyl-, methyldiethyl- triethyl- and diethylphenylsilanes and their chemical characteristics are described. A new method for the derivation of oxygen-containing silicon-organic compounds is described. Five references: 3 USSR and 2 USA (1941-1954). Table.

Institution : Acad. of Sc., USSR, The N. D. Zelinskiy Institute of Organ. Chemistry

Submitted : July 12, 1954

VLASOV, V.M.

SHOSTAKOVSKIY,M.F.; SHIKHIYEV,I.A.; VLASOV,V.M.; BELYAYEV,V.I.

Synthesis of vinylisopropyl, vinyldibutyl and vinyldiamyl ethers and their conversions. Dokl. AN Azerb. SSR 10 no.7:473-482 '54. (MLRA 8:10)

1. Predstavleno deystvitel'nym chlenom Akademii nauk Azerbaydzhanskoy SSR Yu.G.Mamedaliyevym.
(Vinyl polymers)

SHOSTAKOVSKIY, M.F.; KOCHKIN, D.A.; SHIKHIYEV, I.A.; VLASOV, V.M.

Investigation in the field of oxygenated silicon organic compounds. Part 7. Synthesis and certain conversions of silanols. Zhur.ob. Khim. 25 no.3:622-626 Mr '55. (MLRA 8:7)

1. Institut organicheskoy khimii Akademii nauk SSSR.
(Silanol)

27214
S/081/61/000/014/011/030
B103/B217

5.3700

AUTHORS: Shostakovskiy, M. F., Vlasov, V. M.

TITLE: Synthesis of some trialkyl silanols

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 14, 1961, 257, abstract 14Zh289 (Sb. nauchn. rabot Yaroslavsk. med. in-ta, 1959, vyp. 22, 511-514)

TEXT: Pure $R_2R'SiOH$ (Ia-b; here and in the following a) R = CH_3, R' = C_2H_5; b) R = C_2H_5, R' = CH_3) suited for optical studies were synthesized as follows: $R_2R'SiCl$ (II) + ethylene oxide (III) $\rightarrow R_2R'SiOCH_2CH_2Cl$ (IV) $\rightarrow$ I + $HOCH_2CH_2OH$ (V). A weak stream of III is conducted through the ethereal solution of 0.1 mole of Ia up to the required overweight (20 - 25°C) and (here and in the following, the yield is given in %, and the boiling point in °C/mm, $n^{20}D$, d_4^{20}) 93, 71-72/39, 1.4260, 0.9469 of IVa are isolated. Similarly 91.8, 67-68/13, 1.4316,

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27214
S/081/61/000/014/011/050
B103/B217

Synthesis of some trialkyl silanols

0.9478 of IVb were obtained from 0.1 mole of IIb and III. 5 % NaOH and 3-4 drops of phenol phthalein are added to the ethereal solution of 18 g of IVb, and the mixture is vigorously stirred for 1 hr. 72, 61-62/30, 1.4204, 0.8456 of Ib are isolated from the ethereal layer by the usual treatment after 3 hr when the color of the indicator has vanished). V was separated from the aqueous layer in a yield of 66.1 %. 86, 58/50, 1.4070, 0.8335 of Ia were obtained from 0.1 mole of IVa under similar conditions. [Abstracter's note: Complete translation.]

Card 2/2

VLASOV, V.M.; POLUKEYEVA, M.G.

The 20th anniversary of the municipal chemical laboratory for students. Khim. v shkole 15 no.3:93-94 My-Je '60. (MIRA 14:7)
(Yaroslavl—Chemical laboratories)

89522

S/079/61/031/002/018/019
B118/B208

15.8116

AUTHORS: Shostakovskiy, M. F. and Vlasov, V. M.

TITLE: Synthesis of trialkyl vinyl hydroxy silanes from acetylene and silanols

PERIODICAL: Zhurnal obshchey khimii, v. 31, no. 2, 1961, 683

TEXT: Vinyl ethers containing silicon recently raised the interest of chemists being applicable as monomers to the synthesis of high-molecular compounds. The authors were the first to synthesize trialkyl vinyl hydroxy silanes, and to describe their properties (Ref. 1). Other authors showed in Ref. 2 that trialkyl vinyl hydroxy silanes may be synthesized by another method. As the attempts of the afore-mentioned research workers of synthesizing these compounds by the method of direct vinylation according to the reaction of Favorskiy-Shostakovskiy were unsuccessful, the incorrect conclusion was drawn that this reaction be not applicable to the synthesis of trialkyl vinyl hydroxy silanes (Ref. 3). Thorough investigations of the conditions to be observed in direct vinylation carried out by the authors disclosed that the main hindrance in this reaction, under the conditions of

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Synthesis of trialkyl ...

synthesis, was the high tendency of silanols toward conversion to disiloxane. To suppress this undesirable conversion, they suggested the application of excess acetylene. The synthesis of trialkyl vinyl hydroxy silanes was rendered possible according to equation

$$(R)_3SiOH + nHC \equiv CH \longrightarrow (R)_3Si - O - CH = CH_2 + n - 1HC \equiv CH.$$

[Abstracter's Note: This is a complete translation of the original paper.] There are 3 Soviet-bloc references.

ASSOCIATION: Institut organicheskoy khimii Akademii nauk SSSR (Institute of Organic Chemistry of the Academy of Sciences USSR)

SUBMITTED: September 18, 1960

SHOSTAKOVSKIY, M.F.; VLASOV, V.M.; GORBAN', A.K.

Synthesis of vinyl ether and acetals on the basis of ℓ -menthol. Zhur. ob.khim. 32 no.6:1729-1734 Je '62. (MIRA 15:6)

1. Irkutskiy institut organicheskoy khimii Sibirskogo otdeleniya Akademii nauk SSSR.
(Ethers) (Acetaldehyde) (Menthol)

SHOSTAKOVSKIY, M. F.; VLASOV, V. M.; MIRSKOV, R. G.

Synthesis of organotin acetylenic ethers. Zhur. ob. khim. 33 no.1:324 '63. (MIRA 16:1)

1. Irkutskiy institut organicheskoy khimii Sibirskogo otdeleniya AN SSSR.

(Tin organic compounds) (Acetylene compounds)

VOLKOVA, I.B.; NALIVKIN, D.V.; SLATVINSKAYA, Ye.A.; BOGOMAZOV, V.M.; GAVRILOVA, O.I.; GUREVICH, A.B.; MUDROV, A.M.; NIKOL'SKIY, V.M.; OSHURKOVA, M.V.; PETRENKO, A.A.; POGREBITSKIY, Ye.O.; RITENBERG, M.I.; BOCHKOVSKIY, F.A.; KIM, N.G.; LUSHCHIKHIN, G.M.; LYUBER, A.A.; MAKEDONTSOV, A.V.; SENDERZON, E.M.; SINITSYN, V.M.; SHORIN, V.P.; BELYANKIN, L.F.; VAL'TS, I.E.; VLASOV, V.M.; ISHINA, T.A.; KONIVETS, V.I.; MARKOVICH, Ye.M.; MOKRINSKIY, V.V.; PROSVIRYAKOVA, Z.P.; RADCHENKO, O.A.; SEMERIKOV, A.A.; FADDEYEVA, Z.I.; BUTOVA, Ye.P.; VERBITSKAYA, Z.I.; DZENS-LITOVSKAYA, O.A.; DUBAR', G.P.; IVANOV, N.V.; KARPOV, N.F.; KOLESNIKOV, Ch.M.; NEFED'YEV, L.P.; POPOV, G.G.; SHTEMPEL', B.M.; KIRYUKOV, V.V.; LAVROV, V.V.; SAL'NIKOV, B.A.; MONAKHOVA, L.P.[deceased]; MURATOV. M.V.; GORSKIY, I.I., glav. red.; GUSEV, A.I., red.; MOLCHANOV, I.I., red.; TYZHNOV, A.V., red.; SHABAROV, N.V., red.; YAVORSKIY, V.I., red.; REYKHERT, L.A., red.izd-va; ZAMARAYEVA, R.A., tekhn. red

[Atlas of maps of coal deposits of the U.S.S.R.]Atlas kart uglenakopleniia na territorii SSSR. Glav. red. I.I.Gorskii. Zam. glav. red. V.V.Mokrinskii. Chleny red. kollegii: F.A.Bochkovskiy i dr. Moskva, Izd-vo Akad. nauk SSSR, 1962. 17 p.
(MIRA 16:3)

1. Akademiya nauk SSSR. Laboratoriya geologii uglya. 2. Chlen-korrespondent Akademii nauk SSSR (for Muratov).
(Coal geology--Maps)

L 7895-66 EWT(m)/EPF(c)/EWP(j)/EWP(t)/EWP(b)/EWA(c) IJP(c) JD/RM

ACC NR: AP5024967 SOURCE CODE: UR/0286/65/000/016/0032/0032

AUTHORS: Shostakovskiy, M. F.; Vlasov, V. M.; Mirskov, R. G.

ORG: none

TITLE: Method for obtaining organic tin compounds. Class 12, No. 173757

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 16, 1965, 32

TOPIC TAGS: tin compound, acetylene, organotin compound

ABSTRACT: This Author Certificate presents a method for obtaining organic tin compounds having an Sn-C bond by the reaction of acetylene compounds containing free hydrogen acetylene with organic compounds of the type: $R_3SnØR'$ (R - alkyl, aryl; R' - R, H, SnR_3). To broaden the selection of organic tin compounds, compounds of the formula $CH \equiv CR''$ (R'' has various meanings, e.g., $-CH_2CH_2ØCH = ØH_2$, $-CH_2ØCH(ØC_4H_9)CH_3$, $-CH_2ØCH_3$, $-CH_2ØSn(C_2H_5)_3$, besides $-C_6H_5$) are used as the initial acetylene compounds. The process is carried out in an organic solvent, e.g., benzene or toluene.

SUB CODE: 07/ SUBM DATE: 05Nov63

Card 1/1

UDC: 547.419.6.07

SHOSTAKOVSKIY, M.F.; VLASOV, V.M.; SKVORTSOV, Yu.M.; L'VOV, A.I.

Synthesis of vinyl ethers of acetylenic alcohols by indirect vinylation. Zhur. org. khim. 1 no.8:1514-1515 Ag '65.
(MIRA 18:11)

1. Irkutskiy institut organicheskoy khimii Sibirskogo otdeleniya AN SSSR.

YAKOBSON, G.G.; VLASOV, V.M.; VOROZHTSOV, N.N., mladshiy

Interaction of aromatic sulfofluorides with potassium fluoride. Zhur.VKHO 10 no.4:466-467 '65.
(MIRA 18:11)

1. Novosibirskiy institut organicheskoy khimii Sibirskogo otdeleniya AN SSSR.

GLEBOV, V.D.; VLASOV, V.M.

Determination of displacements of statically undeterminate frame girders. Sbor. dokl. po gidr. VNIIG no.4:7-16 '62.
(MIRA 18:7)

MOKRINSKIY, Vladimir Vladimirovich; VAL'TS, Irma Ernestovna; VLASOV, Vladimir Mikhaylovich; ISHINA, Tamara Andreyevna; PROSVIRYAKOVA, Zoya Petrovna; LAVROV, V.V., doktor geol.-miner. nauk, otv. red.

[Characteristics of the development and distribution of Early Mesozoic coal accumulation in the Crimea, the Caucasus, and the Caspian Sea region] Zakonomernosti razvitiia i razmeshcheniia rannemezozoiskogo uglenakopleniia na territorii Kryma, Kavkaza i Prikaspiia. Moskva, Nauka, 1965. 222 p. (MIRA 18:7)

1. Leningrad. Vsesoyuznyy nauchno-issledovatel'skiy geologicheskiy institut.

SHOSTAKOVSKIY, M.F.; VLASOV, V.M.; MIRSKOV, R.G.

Synthesis of organotin acetylenic ethers. Zhur. ob. khim. 35 no.6:1121 Je '65. (MIRA 18:6)

1. Irkutskiy institut organicheskoy khimii Sibirskogo otdeleniya AN SSSR.

SHOSTAKOVSKIY, M.F.; VLASOV, V.M.; MIRSKOV, R.G.

Synthesis of organotin oxygen-containing compounds of the acetylene series. Dokl.AN SSSR 159 no.4:869-871 D '64
(MIRA 18:1)

1. Institut organicheskoy khimii Sibirskogo otdeleniya AN SSSR, Irkutsk. 2. Chlen-korrespondent AN SSSR (for Shostakovskiy).

SHOSTAKOVSKIY, M.F.; VIASOV, V.M.; MIRSKOV, R.G.

Synthesis of organotin acetylenic compounds. Zhur. ob. khim. 35 no.4:750 Ap '65. (MIRA 18:5)

1. Irkutskiy institut organicheskoy khimii Sibirskogo otdeleniya AN SSSR.

L 16063-65 EWT(m)/EPF(c)/EWP(j)/T Pc-4/Pr-4 ESD(t)/ESD(gs) RM

ACCESSION NR: AP4046173 S/0079/64/034/009/2843/2845

AUTHOR: Shostakovskiy, M. F.; Vlasov, V. M.; Mirskov, R. G.; Loginova, I. Ye.

TITLE: Synthesis and transformation of organic tin-acetylene compounds. III. Organic tin-acetylene acetals

SOURCE: Zhurnal obshchey khimii, v. 34, no. 9, 1964, 2843-2845

TOPIC TAGS: tin acetylene compound, tin acetylene acetal, acetylene acetal, tin acetylene compound synthesis, [illegible]

ABSTRACT: In continuation of earlier work, the interaction between non-symmetrical acetylene acetals with hexa-alkyl stannoxane and trialkylmethoxy stannanes was studied [illegible] hydrogen in the acetylene group. Reaction of [illegible] with non-symmetrical acetylene acetals of primary, secondary and tertiary alcohols proceeds according to the following schema:

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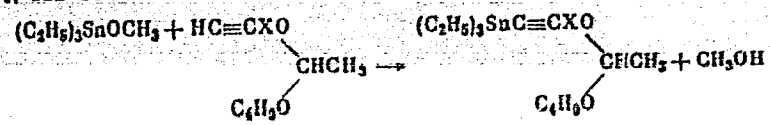
L 16063-65

ACCESSION NR: AP4046173



$X = -CH_2-$; $-CH_2CH_2-$; $-CH(CH_3)-$; $-C(CH_3)_2-$; (yield about 70%)

Factors such as the ratio of the 2 starter materials, removal of water during the reaction, temperature and duration of reaction were found to influence the yield; a 1:2 ratio of the stannous compound and the acetal, 100C temperature, 3 hours' reaction time and removal of water during the reaction gave best results. Infrared spectra of the end products showed intense bands at a 2144-2148 cm^{-1} frequency corresponding to valence vibration of the C≡C bond at the α position with respect to the Sn atom. Four reaction products are presented in a table; a 53.4% yield of 1-/1'-(triethylstannyl)propine-1'-oxy/-1-(butoxy)ethane and 64.3% of 1-/1'-(triethylstannyl)propine-1'-oxy/-1-(butoxy)-ethane was obtained. The possibility of interaction of such compounds was determined for the first time, showing the great mobility of the acetylene hydrogen atom in such reactions. Orig. art. has: 2 formulas and 1 table.

Card 2/3

L 16063-65
ACCESSION NR AP4046173

ASSOCIATION Irkutskiy [illegible] Sibirskogo [illegible] Akademii [illegible]

SUBMITTED [illegible]

SUB CODE: GC, OC, MT NO REF SOV: 002 OTHER: 000

Card 3/3

SHOSTAKOVSKIY, M.F.; VLASOV, V.M.; MIRSKOV, R.G.; PETROVA, V.N.

Oxygen-containing acetylenic organotin compounds. Part 9: Synthesis and transformations of organotin acetylenic ethers. Zhur. ob. khim. 35 no.1:47-51 Ja '65. (MIRA 18:2)

1. Irkutskiy institut organicheskoy khimii Sibirskogo otdeleniya AN SSSR.